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10/717,856	11/19/2003	Eric Mics	V8998-6	9502

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EXAMINER

HOFFMANN, JOHN M

ART UNIT PAPER NUMBER

1731

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/717,856

Applicant(s)

MICS ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 11-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Okude 5732170.

The paragraph starting at col. 11, line 54 discloses the heating an end of a fiber by heating to 1800 C so as to expand the mode-field diameter.

Claim 2 is met because any fiber can be used to compensate a fiber of opposite dispersion. Given two fibers A and B with opposite dispersions, one can consider A to compensate for B, and like wise that B can compensate for A. It is all a matter of the use of the fiber, not the fiber itself. The use of the fiber is not presently claimed.

Claim 3: 100 sec is within the time range.

Claim 5 is met because it merely refers to an intended use – there is no actual requirement of creating a splice.

Claim 11 is clearly met – see figure 2C and the Abstract for example

Claims 12-13 are met for the reasons given above.

Claim 15: it is deemed that claim 15 is directed to an intended second optical fiber, rather than the second optical fiber of claim 11. Other interpretations are also reasonable – but they would not be the broadest reasonable interpretations.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 14, 16 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okude alone, or in view of O'Toole 6336749.

Okude does not teach 10-30 minutes. O'Toole is cited as showing different sized fibers (figure 6). It would have been obvious to use the Okude process on any sized fiber. It would have been obvious to perform routine experimentation to determine the optimal time for treatment, depending on the fiber diameter, dopant, and temperature. One realizes that a larger fiber takes more time for treatment – because the larger the fiber, the further the diffusing dopant needs to travel and the longer it takes. And that different dopants have different coefficients of diffusion and that higher lower temperatures require longer to occur.

Claim 6: Okude does not disclose that the fiber has a 1 mm dimension or a 6 mm dimension. Figure 6 of O'toole shows that to taper the fiber. It would have been obvious to create a taper of 1 mm to 6 mm if one wishes to splice a 1 mm diameter fiber to a 6 mm diameter fiber. Alternatively, to have the core taper from 1 mm to 6 mm if that is the diameter of the fiber cores that one has.

Claim 14 and 16 are similarly met.

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Claims 7-10, 17-23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okude alone, or in view of Ueda 5372623.

Ueda is cited as showing that methanol is a known fuel for treating gas (col. 7, lines 1-4.) It would have been obvious to use methanol or whatever fuel is most economical/practical to use in the Okude process, because such is the mere substitution of one known fuel for another. Alternatively/additionally, it would have been obvious not to use hydrogen, because of the known hazards of using the odorless gas.

It is noted that special results are attributed to the use of methanol. Examiner did not see any evidence of new and unexpected results. Applicant is reminded that a showing of unexpected results must be attributed to the entire scope of the claims – and not just a particular embodiment.

Claims 17-23 and 25-27 are similarly met.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okude alone, or in view of Ueda 5372623 and O'Toole 6336749.

See the reasons given above.

### ***Response to Arguments***

Applicant's arguments filed 27 January 2005 have been fully considered but they are not persuasive.

It is argued that the rejection is improper because Okude does not disclose all limitations. Specifically, it is argued that Okude does not have the step of "heating an end of the optical fiber". This is not convincing, because the end of an Okude fiber is clearly heated. It is requested that Applicant point out how it could be possible to practice the Okude method without heating an end of the fiber.

It is further argued that Okude teaches heating the area of connection between the fibers. And that this "clearly means" that a connection has been formed between the fibers and heat is being applied to the interior spliced region. First examiner does not agree with Applicant's assertion as to what Okude "clearly means". However, it is largely immaterial because the claim does not preclude having a connection on the end which is heated. Although applicant may disclose not having a connection/splice, such is largely irrelevant because the claims are broad and are open to having a connection during the heating step.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In other words, Applicant's argument that O'Toole not having the step of

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heating the end is not very important: the rejection does not suggest or state that O'Toole supplies that teaching. Okude is the basis for the teaching.

It is further argued that neither Okude nor Ueda suggests expanding the mode filed diameter by applying heat from an organic liquid. As indicated above one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. Applicant has not pointed out how the combination of references as set for in the rejection is improper.

With regard to the argued unexpected results allegedly shown in the specification, it is noted that applicants bear the burden of establishing that the claimed subject matter in fact imparts unexpected properties. See In re Klosak, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972). However, Examiner is not satisfied that the evidence of record offered for comparison demonstrates results that are truly unexpected and commensurate in scope with the claims. It is deemed that applicant have not met their burden of explaining how the results reported in the specification can be extrapolated from the limited instances presented so as to be guaranteed as attainable through practicing the invention as broadly claimed. Moreover, applicant have not met their burden of establishing that the reported bonding results would have been truly unexpected to a person of ordinary skill in the art. MOST importantly, Examiner is unsure as to what result applicant is referring to. Examiner cannot adequately consider unexpected results if Examiner is not clearly informed as to what results Applicant is referring to. Additionally it is noted that there is no "Example 1" in the present specification, although Examiner assumes it to be the sole Example starting on page 6.

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Examiner could not find any unexpected results in the example – nor any result that is asserted to be unexpected. To reiterate from the previous action: examiner cannot find new and unexpected results. Applicant is required to specifically and clearly (by page, and line number) all evidence which supports applicant's assertion of new and unexpected results.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

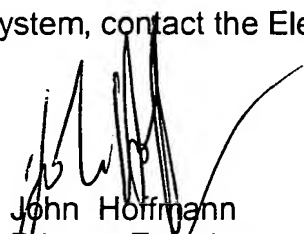
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John Hoffmann  
Primary Examiner  
Art Unit 1731

2-24-05

jmh